

## REMARKS

### Rejection Of The Claims Under 35 U.S.C. §102(b) Should Be Withdrawn

Claims 1-4, 9 and 14 stand rejected under 35 U.S.C. §102(b). Applicants respectfully traverse this rejection.

DE 4238378 discloses a coating process for a substrate comprising a first and second coat with pigment lacquer formulations. The first applied coat consists of particles less than 20 microns in size. The second applied coat consists of a layer of particles 20-50 microns in size, the resultant coating process yields a substrate coated with a heterogeneous 2-layer coat. Moreover, Example (1) of DE 4238378 provides for a first coat lacquer formulation which contains 5% wt. of pigments with a particle size less than 20 microns and the second coat lacquer formulation contains 5% wt. of pigments with particle sizes of 20-50 microns.

By contrast, Applicants' instant invention is directed to an absorber material with a pale intrinsic color in a single layer of an inorganic platelet-form substrate having a particle size distribution of 1 to 60 microns in size, as now recited in claim 1. Applicant's instant invention is not a 2-layer substrate whereby each layer is characterized by particles of a different size distribution.

Therefore, DE 4238378 cannot be considered anticipatory to the claimed invention and any rejection of claim 1 and dependent claims 2-4, 9 and 14 should be withdrawn.

Claims 1, 7, 9 and 11-13 stand rejected under 35 U.S.C. §102(b) as anticipated by

Gusi discloses an absorbing resin composition which includes at least (1) a urea-based thermosetting resin, (2) a cellulose reinforcement, and (3) titanium dioxide. The Gusi resin composition is clearly organic based due to the presence of the urea-based resin and the cellulose-based reinforcement material. During preparation of the article disclosed by Gusi, the urea-based resin is polymerized under an initial pressure of about 150 kg/cm<sup>2</sup> and a temperature of about 140°C to 160°C wherein cellulose is added in the polymerization and the titanium dioxide is preferably added after polymerization (col. 3, lines 41-52). Also, Gusi does not disclose or teach a coated layer which is a mixture of absorber material.

Applicants' claimed invention is directed to an inorganic platelet-form substrate. Suitable inorganic platelet-form substrates suitable for making the absorber material are disclosed in the specification at page 2. Thus, the reference does not anticipate the invention as patentees require a mixture of organic components, such as a urea resin with a complex polysaccharide such as cellulose.

Clearly, the Gusi invention which is directed to a laser markable article which is comprised of organic components cannot be considered anticipatory to the instant invention which is directed to a single-layer inorganic substrate. Any rejections of the claims based on the Gusi reference should be withdrawn.

#### **Rejection Of The Claims Under 35 U.S.C. §103 Should Be Withdrawn**

As discussed above, Gusi discloses an organic based composition which is comprised of a urea-based resin and a cellulose material. Williams discloses a laser markable white pigment composition which includes a first and second pigment. The first

pigment includes both organic and inorganic components (col. 2, lines 16-19). Moreover, the pigment compositions of Williams discloses a fluoropolymer (col. 2, lines 23-26).

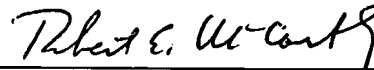
There must be a suggestion or motivation to combine the pigments and fluoropolymer of Williams with the laser markable article of Gusi. Claim 5 of the instant invention is directed to an absorber material of different inorganic platelet-form substrates. Even if there were a suggestion to combine the Gusi reference with the Williams reference, the resultant combination could not yield Applicant's claimed invention of an inorganic platelet formed substrate.

Where the prior art gives no indication of which parameters are critical and no directions to which of any possible choices is likely to be successful, the fact that the claimed combination falls within the scope of possible combinations taught therein does not render the combination patentably obvious. *In re O'Farrell* (CAFC 1988) 853 F2d 894. 7 PQ2d 1673.

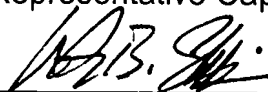
Any rejections of claims 5 and 8 based on obviousness under §103 should be withdrawn.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached papers are captioned "**Version With Markings To Show Changes Made**".

Respectfully submitted,



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**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**In The Claims:**

**Please amend the claims as follows:**

1. (Twice Amended) Laser-markable paper and board products wherein the paper comprises, as absorber material, ~~an~~ a single layer inorganic platelet-form substrate having a pale intrinsic color and a particle size distribution of 1  $\mu\text{m}$  to 60  $\mu\text{m}$ , and the amount of said absorber material is being 1% to 5% by weight based on the body weight of the paper.

11. (Amended) Laser-markable paper and board products comprising as absorber material, ~~an~~ a single layer inorganic platelet-form substrate having a pale intrinsic color and a particle size of 1  $\mu\text{m}$  to 60  $\mu\text{m}$ .

12. (Amended) A method of marking paper or board, comprising exposing to laser radiation paper or board comprising an absorber material which is an inorganic platelet-form substrate having a pale intrinsic color and a particle size of 1  $\mu\text{m}$  to 60  $\mu\text{m}$ , wherein said absorber material is applied in a single coat layer.

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